

EXHIBIT 4

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

GLOBAL EQUITY MANAGEMENT (SA) PTY. LTD.,	§	CIVIL ACTION NO. 2:16-cv-00095 (Consolidated Lead Case)
Plaintiff,	§	JURY TRIAL DEMANDED
v.	§	
EXPEDIA, INC. and EXPEDIA.COM,	§	
Defendants.	§	

DECLARATION OF RICHARD M. GOODIN, P.E.

1. I am over the age of twenty-one (21) and competent to make this declaration. I am also qualified to give testimony under oath. The facts and opinions listed below are within my personal knowledge.
2. I provide the following declaration on behalf of Expedia, Inc. and Expedia.com (“Expedia”), Hotels.com, LP (“Hotels.com”), CruiseShipCenters, LP (“CruiseShipCenters”), eBay, Inc. (“eBay”), Travelocity USA, L.P. (“Travelocity”), Orbitz Worldwide, Inc. (“Orbitz”), Hotwire, Inc. (“Hotwire”), TripAdvisor LLC, (“TripAdvisor”), Airbnb, Inc. (“Airbnb”), Alibaba.com, Inc. and Alibaba.com Singapore E-Commerce Private Limited (“Alibaba”), and Booking.com B.V. (“Booking”). I collectively refer to these entities as “Defendants” because I understand they are defendants in an action brought by an entity called Global Equity Management (SA) Pty. Ltd., which I refer to as “GEMSA” or Plaintiff.

3. I am being compensated for my time in this proceeding at my standard consulting rate of \$500/hr. My compensation in no way depends on the outcome of this proceeding or the content of my opinions.
4. I understand that GEMSA has sued the Defendants for infringement of U.S. Patent No. 6,690,400 (“the ‘400 Patent,” attached as Exhibit 1 hereto) and U.S. Patent No. 7,356,677 (“the ‘677 Patent,” attached as Exhibit 2 hereto), which I refer to as the patents-in-suit.
5. I have been asked to provide my opinions about what certain claim terms of the patents-in-suit mean (if anything) to a person having ordinary skill in the art, whose qualifications I address in more detail below. I have provided those opinions, as requested, below.

INTRODUCTION

6. Exhibit 3 is a copy of my current curriculum vitae (“CV”), which includes my relevant work history and a listing of my prior testimony. As set forth in my CV, I have worked for over 35 years in the field of computer engineering and computer technology, and in that time have focused on both hardware and software aspects of computer engineering and computer technology.
7. I am currently the President and Chief Consultant of Goodin & Associates, Inc. I have worked or consulted for Fortune 500 companies such as Sperry Univac, Sun Microsystems, Apple Computer, Data General, Tektronix, Mitsubishi, and nVidia. I have worked in roles ranging from Developer to Chief Scientist.
8. My principal focus throughout my career has been in computer graphics, both hardware and software, in particular in generating photorealistic imagery. Outside my focus, I have

dealt with a wide variety of hardware and software systems including storage technologies and system virtualization.

9. While I consulted at 3Dfx Interactive, I architected and implemented the OpenGL API for the Voodoo and Banshee products and implemented the hardware VGA core for Banshee. This included BIOS support work for the VGA core and BIOS based power management.
10. While I consulted at ULSI, I architected one of the first 2D and 3D graphics accelerators using on chip embedded DRAM. At Mitsubishi, I was a memory technology evangelist for graphics use of Mitsubishi's CDRAM products.
11. Almost since the inception of Goodin & Associates, I have been a prolific user of multi-boot systems. Multi-boot systems have allowed me to develop for multiple clients (usually Windows and Linux) at the same time on shared hardware.
12. More recently, I have been using virtual machines in place of multi-boot systems to achieve similar development flexibility.
13. During my time at Goodin & Associates, I have become familiar with several relevant third-party software products and environments, including VMWare, Parallels, VirtualBox and Xen virtualization systems.
14. During my time at Goodin & Associates, I have become very familiar with Amazon's EC2 (Elastic Compute Cloud) and Lambda (Server Independent Code Instances). I have used EC2 to provide machine instances for graphics rendering and system simulation without having to purchase and manage a hardware machine farm.
15. Prior to and concurrent with my work at Goodin & Associates, Inc., I have been employed by various entities in positions that involved computer hardware and software.

For instance, from November 2004 through October 2006, I was employed by Apple Computer, where I architected software and wrote code in Objective-C, C++, and C for 2D and 3D graphics at multiple levels of the OS X (OS ten) operating system during the transition to Intel processors. I principally worked with the EFI BIOS implementation of graphics and also EFI BIOS power management related to graphics. Another responsibility I had at Apple was to configure systems for new hardware bring-up, including formatting drives and provisioning systems.

16. From January 1999 through October 1999, I was employed by Raydiant, Inc. as a Chief Scientist and lead hardware and software architect for advanced scalable PC graphics accelerator. My work at Raydiant involved architecture and design of high quality rendering algorithms, including shadow generation and the use of accumulation buffers for anti-aliasing.
17. From April 1988 through January 1990, I was employed by Sun Microsystems as a Member of Technical Staff/Architect, where I co-architected and wrote code for the RenderMan compliant, high-quality 3D rendering component of Sun's SunVision visualization product (SunART), which produced photo realistic images of automobiles used by car designers to make style decisions. I was a member of Pixar's RenderMan Advisory Council. I also co-architected and wrote code for Sun's XGL object oriented proprietary graphics library. While at Sun, I also wrote multiprocessor simulation code for graphics and CPU products and various devices.
18. From November 1981 to March 1985, I was employed at Evans & Sutherland, where I reported directly to the Director of Advanced Development evaluating rendering

algorithms and hardware implementations directed at high performance commercial and military applications.

19. From January 1979 to November 1981, I was employed by Sperry Univac GSD as a project engineer, where I designed hardware and wrote diagnostic and operational code for communications, display and storage devices.
20. I am a Senior Member of the Institute of Electrical and Electronics Engineers (IEEE) and a Senior Member of the Association for Computing Machinery (ACM). The IEEE is a hardware society whose core purpose is to foster technological innovation and excellence for the benefit of humanity. For admission to the grade of Senior Member, a candidate shall be an engineer in IEEE-designated fields for a total of 10 years and have demonstrated 5 years of significant performance.
21. The Association of Computing Machinery is the world's largest educational and scientific computing society. Senior Member is an earned membership grade awarded to approximately 25% of members who have demonstrated performance that sets them apart from their peers.
22. I am licensed as a Professional Engineer in the state of North Carolina, Registration Number 036347. I am also a patent agent, registration number 63,323.
23. A more detailed description of my work experience and other qualifications can be found in my CV, which is attached as Exhibit 3 to this declaration.
24. Based on my experience, I believe I am qualified to opine about the state of the art (and the meaning, or lack of meaning, of certain claim terms in the art) of the '400 Patent and the '677 Patent.

LEVEL OF SKILL IN THE ART

25. I understand that one of the relevant factors in this proceeding is the level of skill in the pertinent art. I understand that the pertinent date for this determination is the date of alleged invention. For purposes of this declaration, I have been asked to assume that the date of invention for the '400 Patent is September 29, 1999. Also for purposes of this declaration, I have been asked to assume that the date of invention for the '677 Patent is October 19, 2001.
26. In my opinion, a person of ordinary skill in the art as of September 29, 1999 would have had a bachelor's degree in computer science, computer engineering, or the equivalent, and would have had at least two years' experience in computer operating systems, programs and databases, and/or graphical user interfaces.
27. In my opinion, a person of skill in the art as of October 19, 2001 would have had a bachelor's degree in computer science, computer engineering, or the equivalent, and would have had at least two years' experience in computer operating systems, programs and databases, and/or graphical user interfaces.

OPINIONS REGARDING U.S. PATENT NO. 6,690,400

28. The '400 Patent is clear that the "invention" it allegedly discloses is related to the GUI, stating that "[t]he contents of the Partitions and Cabinets may be modified by a user through a graphic user interface, such as described in this invention." (Exhibit 1 at 3:10-12).
29. With regard to the details of providing a GUI, the '400 Patent's only potentially technical disclosure is the following:

Other related art includes Graphic User Interfaces such as Windows or Xwindows, Bitmap Graphics, VGA, SVGA, User Prompting, Pointing Devices

and Internet (including HTML) interfaces, all of which are known by those skilled in the art of computer programming.

(Exhibit 1 at 3:13-17).

30. The ‘400 Patent’s entire “Brief Summary of the Invention” is directed to a listing of certain functions allegedly provided by the disclosed GUI. (Exhibit 1 at 3:45-4:32).
31. The ‘400 Patent discloses that its GUI “enables a user to allocate and manage resources of a computer system by defining one or more cabinets, each cabinet containing one or more partitions of one or more existing software and/or data.” (Exhibit 1 at 5:9-13). It discloses that this is achieved with “a pointing device and/or keyboard,” but provides no other detail about how the disclosed functions are carried out. (Exhibit 1 at 5:16-20). Instead, the entire description of the figures of the ‘400 Patent is an explanation of the various items within its GUI, and in some instances, an identification of a *function* a GUI element performs when actuated. (Exhibit 1 at 5:53-8:60).
32. Nonetheless, as I describe in more detail below, neither these passages of the ‘400 Patent, nor the remainder of the specification and figures of the ‘400 Patent, disclose algorithms or other structures for performing the functions of the various claim terms I was asked to opine about.

“means for allocating a computer device’s resources to multiple operating system environments, partitioned on individual virtual cabinets, on [a] computer device” (claim 1)

33. I was asked to opine about the meaning the claim term “means for allocating a computer device’s resources to multiple operating system environments, partitioned on individual virtual cabinets, on [a] computer device” would have to a person of ordinary skill in the art.
34. Specifically, I was asked to provide an opinion as to whether the ‘400 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on

my review of the ‘400 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘400 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.

35. I was also asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be used to perform the recited function. This phrase, while made up of certain words that alone have a meaning to those of skill in the art, does not have a computer science meaning as recited in the claims of the ‘400 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any structure in particular. Finally, this term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure.
36. One skilled in the art would understand that the function of “allocating a computer device’s resources to multiple operating system environments, partitioned on individual virtual cabinets, on [a] computer device” cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose computer. Rather, “allocating a computer device’s resources to multiple operating system environments, partitioned on individual virtual cabinets, on [a]

“computer device” is a specialized function particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer cannot make such an allocation unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The ‘400 Patent does not do that.

“moans [sic] for allocating a computer device's resources to at least one operating system on said computer device” (claim 16)

37. I was asked to opine about the meaning the claim term “moans [sic] for allocating a computer device's resources to at least one operating system on said computer device” would have to a person of ordinary skill in the art.
38. Specifically, I was asked to provide an opinion as to whether the ‘400 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on my review of the ‘400 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘400 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.
39. I was also asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be used to perform the recited function. This phrase, while made up of certain words that

alone have a meaning to those of skill in the art, does not have a computer science meaning as recited in the claims of the ‘400 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any structure in particular. Finally, this term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure.

40. One skilled in the art would understand that the function of “allocating a computer device's resources to at least one operating system on said computer device” cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose computer. Rather, “allocating a computer device's resources to at least one operating system on said computer device” is a specialized function particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer cannot make such an allocation unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The ‘400 Patent does not do that.

“means for configuring said at least one partition of said at least one secondary storage device through said secondary storage partitions window” (claim 16)

41. I was asked to opine about the meaning the claim term “means for configuring said at least one partition of said at least one secondary storage device through said secondary storage partitions window” would have to a person of ordinary skill in the art.

42. Specifically, I was asked to provide an opinion as to whether the ‘400 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on my review of the ‘400 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘400 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.
43. I was also asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be used to perform the recited function. This phrase, while made up of certain words that alone have a meaning to those of skill in the art, does not have a computer science meaning as recited in the claims of the ‘400 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any structure in particular. Finally, this term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure.
44. One skilled in the art would understand that the function of “configuring [] at least one partition of [] at least one secondary storage device through [a] secondary storage partitions window” cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose

computer. Rather, “configuring [] at least one partition of [] at least one secondary storage device through [a] secondary storage partitions window” is a specialized function particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer cannot perform such configuration unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The ‘400 Patent does not do that.

“means for manipulating said at least one cabinet record through said cabinet visible partition window” (claim 16)

45. I was asked to opine about the meaning the claim term “means for manipulating said at least one cabinet record through said cabinet visible partition window” would have to a person of ordinary skill in the art.
46. Specifically, I was asked to provide an opinion as to whether the ‘400 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on my review of the ‘400 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘400 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.
47. I was also asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be

used to perform the recited function. This phrase, while made up of certain words that alone have a meaning to those of skill in the art, does not have a computer science meaning as recited in the claims of the ‘400 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any structure in particular. Finally, this term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure.

48. One skilled in the art would understand that the function of “manipulating [] at least one cabinet record through [a] cabinet visible partition window” cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose computer. Rather, “manipulating [] at least one cabinet record through [a] cabinet visible partition window” is a specialized function particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer cannot perform such manipulation unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The ‘400 Patent does not do that.

“means for modifying said at least one cabinet record through said cabinet visible partition window” (claim 16)

49. I was asked to opine about the meaning the claim term “means for modifying said at least one cabinet record through said cabinet visible partition window” would have to a person of ordinary skill in the art.

50. Specifically, I was asked to provide an opinion as to whether the ‘400 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on my review of the ‘400 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘400 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.
51. I was also asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be used to perform the recited function. This phrase, while made up of certain words that alone have a meaning to those of skill in the art, does not have a computer science meaning as recited in the claims of the ‘400 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any structure in particular. Finally, this term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure.
52. One skilled in the art would understand that the function of “modifying [] at least one cabinet record through [a] cabinet visible partition window” cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose computer. Rather, “modifying [] at least one cabinet

record through [a] cabinet visible partition window” is a specialized function particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer cannot perform such modification unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The ‘400 Patent does not do that.

“program code for accessing and displaying each of at least one partition of at least one secondary storage device” (claim 28)

53. I was asked to opine about the meaning the claim term “program code for accessing and displaying each of at least one partition of at least one secondary storage device” would have to a person of ordinary skill in the art.
54. Specifically, I was asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be used to perform the recited function. This phrase, while made up of certain words that alone have a meaning to those of skill in the art, does not have a computer science meaning as recited in the claims of the ‘400 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any structure in particular. This term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure. The recitation of the phrase “program code” likewise does not designate a particular structure

that performs the claimed function. “Program code” is not understood by persons of ordinary skill in the art to have a definite meaning as a name for any particular structure.

55. One skilled in the art would understand that the function of “accessing and displaying each of at least one partition of at least one secondary storage device” cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose computer. Rather, “accessing and displaying each of at least one partition of at least one secondary storage device” is a specialized function particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer cannot perform such accessing and displaying of partitions unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The ‘400 Patent does not do that.
56. I was asked to provide an opinion as to whether the ‘400 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on my review of the ‘400 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘400 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.

“program code for configuring said at least one partition of said at least one secondary storage device through a secondary storage partitions window” (claim 28)

57. I was asked to opine about the meaning the claim term “program code for configuring said at least one partition of said at least one secondary storage device through a secondary storage partitions window” would have to a person of ordinary skill in the art.
58. Specifically, I was asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be used to perform the recited function. This phrase, while made up of certain words that alone have a meaning to those of skill in the art, does not have a computer science meaning as recited in the claims of the ‘400 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any structure in particular. This term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure. The recitation of the phrase “program code” likewise does not designate a particular structure that performs the claimed function. “Program code” is not understood by persons of ordinary skill in the art to have a definite meaning as a name for any particular structure.
59. One skilled in the art would understand that the function of “configuring” a partition through a window cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose computer. Rather, “configuring” a partition through a window is a specialized function

particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer cannot perform such configuring of partitions unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The ‘400 Patent does not do that.

60. I was asked to provide an opinion as to whether the ‘400 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on my review of the ‘400 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘400 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.

“program code for displaying a cabinet selection button bar” (claim 28)

61. I was asked to opine about the meaning the claim term “program code for displaying a cabinet selection button bar” would have to a person of ordinary skill in the art.
62. Specifically, I was asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be used to perform the recited function. This phrase, while made up of certain words that alone have a meaning to those of skill in the art, does not have a computer science meaning as recited in the claims of the ‘400 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any

structure in particular. This term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure. The recitation of the phrase “program code” likewise does not designate a particular structure that performs the claimed function. “Program code” is not understood by persons of ordinary skill in the art to have a definite meaning as a name for any particular structure.

63. One skilled in the art would understand that the function of “displaying a cabinet selection button bar” cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose computer. Rather, “displaying a cabinet selection button bar” is a specialized function particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer cannot perform such displaying unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The ‘400 Patent does not do that.
64. I was asked to provide an opinion as to whether the ‘400 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on my review of the ‘400 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘400 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.

“program code for displaying a cabinet visible partition window...” (claim 28)

65. I was asked to opine about the meaning the claim term “program code for displaying a cabinet visible partition window...” would have to a person of ordinary skill in the art.
66. Specifically, I was asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be used to perform the recited function. This phrase, while made up of certain words that alone have a meaning to those of skill in the art, does not have a computer science meaning as recited in the claims of the ‘400 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any structure in particular. This term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure. The recitation of the phrase “program code” likewise does not designate a particular structure that performs the claimed function. “Program code” is not understood by persons of ordinary skill in the art to have a definite meaning as a name for any particular structure.
67. One skilled in the art would understand that the function of “displaying a cabinet visible partition window” cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose computer. Rather, “displaying a cabinet visible partition window” is a specialized function particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer

cannot perform such displaying unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The ‘400 Patent does not do that.

68. I was asked to provide an opinion as to whether the ‘400 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on my review of the ‘400 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘400 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.

“program code for manipulating said virtual cabinet record through said cabinet visible partition window” (claim 28)

69. I was asked to opine about the meaning the claim term “program code for manipulating said virtual cabinet record through said cabinet visible partition window” would have to a person of ordinary skill in the art.
70. Specifically, I was asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be used to perform the recited function. This phrase, while made up of certain words that alone have a meaning to those of skill in the art, does not have a computer science meaning as recited in the claims of the ‘400 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any

structure in particular. This term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure. The recitation of the phrase “program code” likewise does not designate a particular structure that performs the claimed function. “Program code” is not understood by persons of ordinary skill in the art to have a definite meaning as a name for any particular structure.

71. One skilled in the art would understand that the function of “manipulating [a] virtual cabinet record” cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose computer. Rather, “manipulating [a] virtual cabinet record” is a specialized function particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer cannot perform such manipulating unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The ‘400 Patent does not do that.
72. I was asked to provide an opinion as to whether the ‘400 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on my review of the ‘400 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘400 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.

“program code for [sic] modifying said at least one cabinet record through said cabinet visible partition window” (claim 28)

73. I was asked to opine about the meaning the claim term “program code for [sic] modifying said at least one cabinet record through said cabinet visible partition window” would have to a person of ordinary skill in the art.
74. Specifically, I was asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be used to perform the recited function. This phrase, while made up of certain words that alone have a meaning to those of skill in the art, does not have a computer science meaning as recited in the claims of the ‘400 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any structure in particular. This term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure. The recitation of the phrase “program code” likewise does not designate a particular structure that performs the claimed function. “Program code” is not understood by persons of ordinary skill in the art to have a definite meaning as a name for any particular structure.
75. One skilled in the art would understand that the function of “modifying said at least one cabinet record through said cabinet visible partition window” cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose computer. Rather, “modifying said at least one

cabinet record through said cabinet visible partition window” is a specialized function particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer cannot perform such modifying unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The ‘400 Patent does not do that.

76. I was asked to provide an opinion as to whether the ‘400 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on my review of the ‘400 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘400 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.

OPINIONS REGARDING U.S. PATENT NO. 7,356,677

77. The ‘677 Patent is directed to a “method and apparatus [] that allows rapid switching between multiple operating system environments on a single computer.” (Exhibit 2 at Abstract). According to the ‘677 Patent, the “Super Operating System uses the suspend and resume functions of the power management support functions to suspend and hyberenate [sic] one operating virtual computer system, while activating and operating an alternate virtual computer system on the same computer.” (Exhibit 2 at Abstract).
78. To this end, the ‘677 Patent discloses several specific algorithms for actually suspending one operating system and resuming another. For example, column 10, line 10 through column 11, line 62 discloses several switching algorithms. Likewise, column 12, lines 1

through 41 contains a “Super OS Switching Algorithm.” Figures 10 to 12 also illustrate algorithms for performing various aspects of the switching described in the ‘677 Patent.

79. Nonetheless, as I describe in more detail below, certain claim terms of the ‘677 Patent that I was asked to opine about do not have associated algorithms disclosed in the specification of the ‘677 Patent. In particular, the ‘677 Patent does not describe any mechanism for selecting an operating system to switch to.

“means for selecting one of said virtual computer systems to become next operable before suspending a currently operational virtual computer system” (claim 1)

80. I was asked to opine about the meaning the claim term “means for selecting one of said virtual computer systems to become next operable before suspending a currently operational virtual computer system” would have to a person of ordinary skill in the art.
81. Specifically, I was asked to provide an opinion as to whether the ‘677 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on my review of the ‘677 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘677 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.
82. I was also asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be used to perform the recited function. This phrase, while made up of certain words that alone have a meaning to those of skill in the art, does not have a computer science

meaning as recited in the claims of the ‘677 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any structure in particular. Finally, this term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure.

83. One skilled in the art would understand that the function of “selecting one of [a plurality of] virtual computer systems to become next operable before suspending a currently operational virtual computer system” cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose computer. Rather, “selecting one of [a plurality of] virtual computer systems to become next operable before suspending a currently operational virtual computer system” is a specialized function particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer cannot make such a selection unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The ‘677 Patent does not do that.

“selection means for sequentially choosing from among said plurality of operating systems” (claim 3)

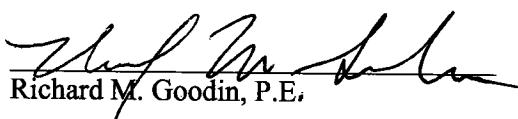
84. I was asked to opine about the meaning the claim term “selection means for sequentially choosing from among said plurality of operating systems” would have to a person of ordinary skill in the art.

85. Specifically, I was asked to provide an opinion as to whether the ‘677 Patent discloses any structure or algorithm for performing the function recited in this phrase. Based on my review of the ‘677 Patent, it is my opinion that nothing in that patent discloses an algorithm to perform this function. In coming to this conclusion, I looked in the ‘677 Patent for an algorithm expressed in any form: pseudocode, mathematical formulas, prose, flow charts, and the like. I did not locate an operative algorithm for this claimed function.
86. I was also asked to provide an opinion as to whether the language of this phrase would be understood by a person of ordinary skill in the art to connote a definite, particular structure for performing the recited function. In my opinion, this term does not convey to a person of ordinary skill in the art anything about a particular structure that could be used to perform the recited function. This phrase, while made up of certain words that alone have a meaning to those of skill in the art, does not have a computer science meaning as recited in the claims of the ‘677 Patent. Instead, this appears to be merely an abstraction that describes the function being performed without identifying any structure in particular. Finally, this term does not identify any structure by its function; it is merely a functional recitation independent of a particular, required structure.
87. One skilled in the art would understand that the function of “sequentially choosing from among said plurality of operating systems” cannot be performed by any general purpose computer, but instead must be performed by a general purpose computer specially programmed with a particular algorithm to perform this function. For example, this function is not analogous to the generic function of “processing” that may be performable by any general purpose computer. Rather, “sequentially choosing from among said

plurality of operating systems" is a specialized function particular to this purported invention, and it would require a particular algorithm. Based upon my knowledge and experience, a general purpose computer cannot make such a selection unless it is specially programmed to do so. It is my understanding from counsel that, in a situation like this, where the function is only performable by a general purpose computer that is specially programmed, the specification must disclose an algorithm for performing the function. The '677 Patent does not do that.

I hereby declare under the penalty of perjury that the statements herein are true and correct to the best of my knowledge and belief.

Signed this 26th Day of August, 2016 in Apex, North Carolina.


Richard M. Goodin, P.E.

